Abstract of the Disclosure

A MAC master apparatus for executing a multi-point control protocol (MPCP) data in an optical line termination (OLT) of an Ethernet passive optical network (PON) is provided.   The MPCP master apparatus includes a CPU interface unit, two

5   or more memory arbitration control units, a SGA table memory, a RTT table memory, a static grant generation unit, a dynamic grant generation unit, a static grant queue, a dynamic grant queue, a sending message queue, a sending multiplexing unit, a time setting unit, a receiving window generation unit, an upstream grant queue, a received demultiplexing unit, a report queue and a received message queue.

10   Therefore, any frame, including MPCP frames from/to the CPU can be sent or received, and a grant can be allocated statically according to a setting or dynamically according to a report from the ONUs.